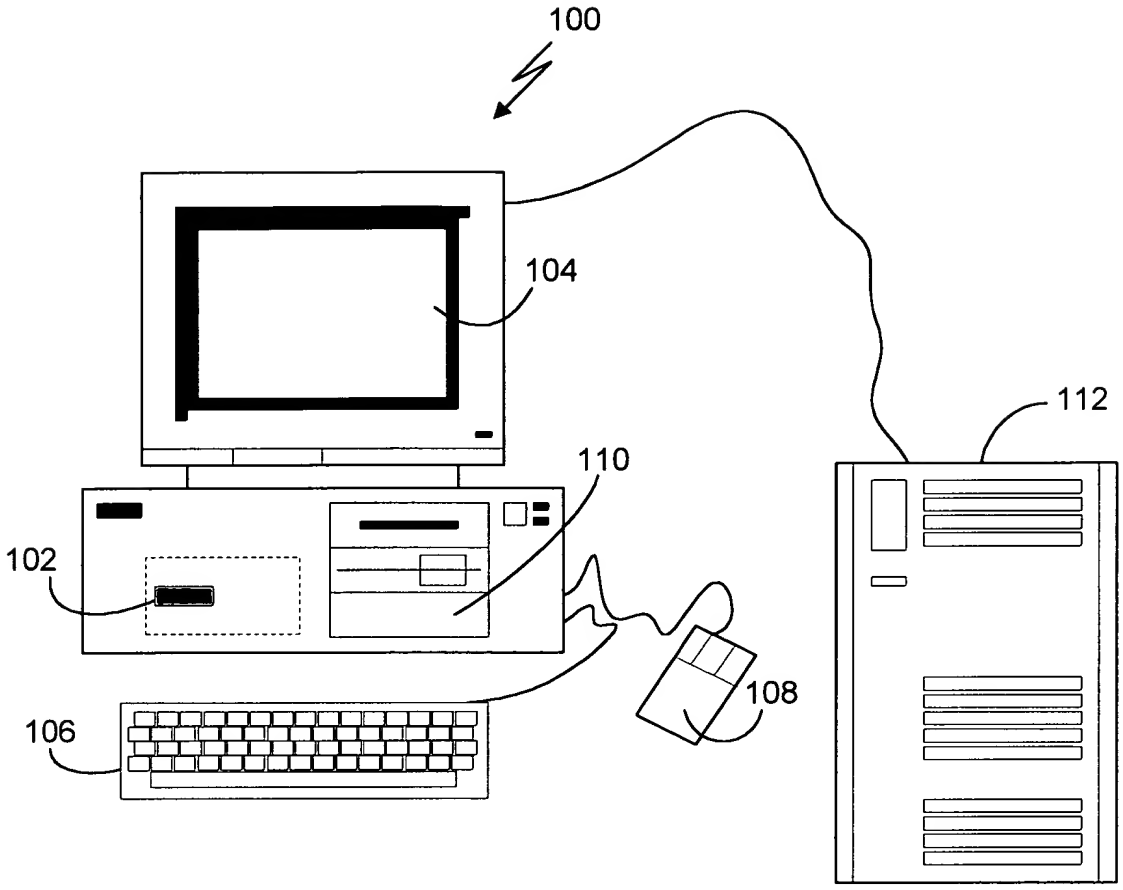

FIG. 1

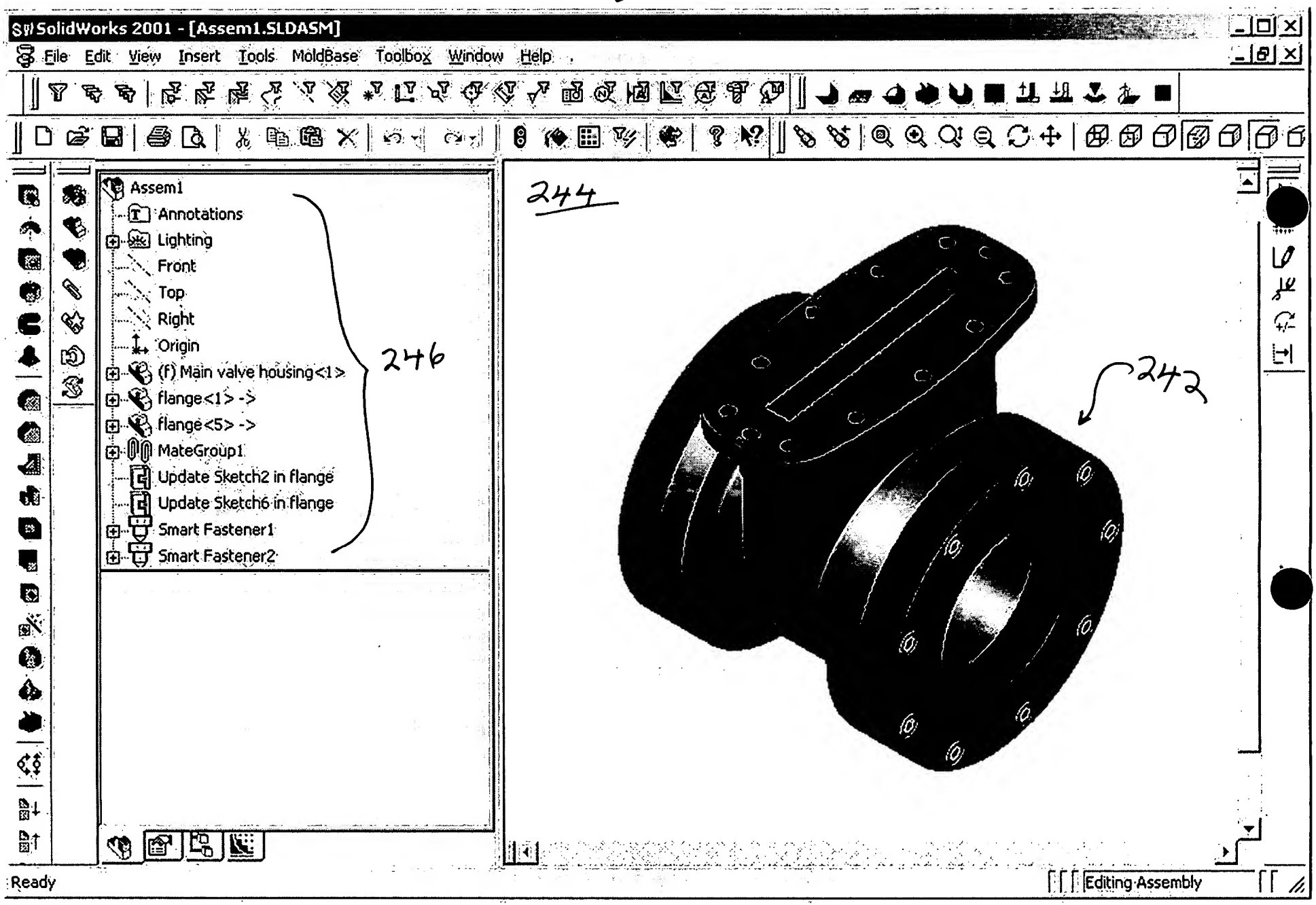
240
SolidWorks 2001 - [Assem1.SLDASM]
File Edit View Insert Tools MoldBase Toolbox Window Help
Assem1
Annotations
Lighting
Front
Top
Right
Origin
(f) Main valve housing<1>
flange<1> ->
flange<5> ->
MateGroup1
Update Sketch2 in flange
Update Sketch6 in flange
Smart Fastener1
Smart Fastener2
246
244
242
Ready
Editing Assembly

Fig. 2

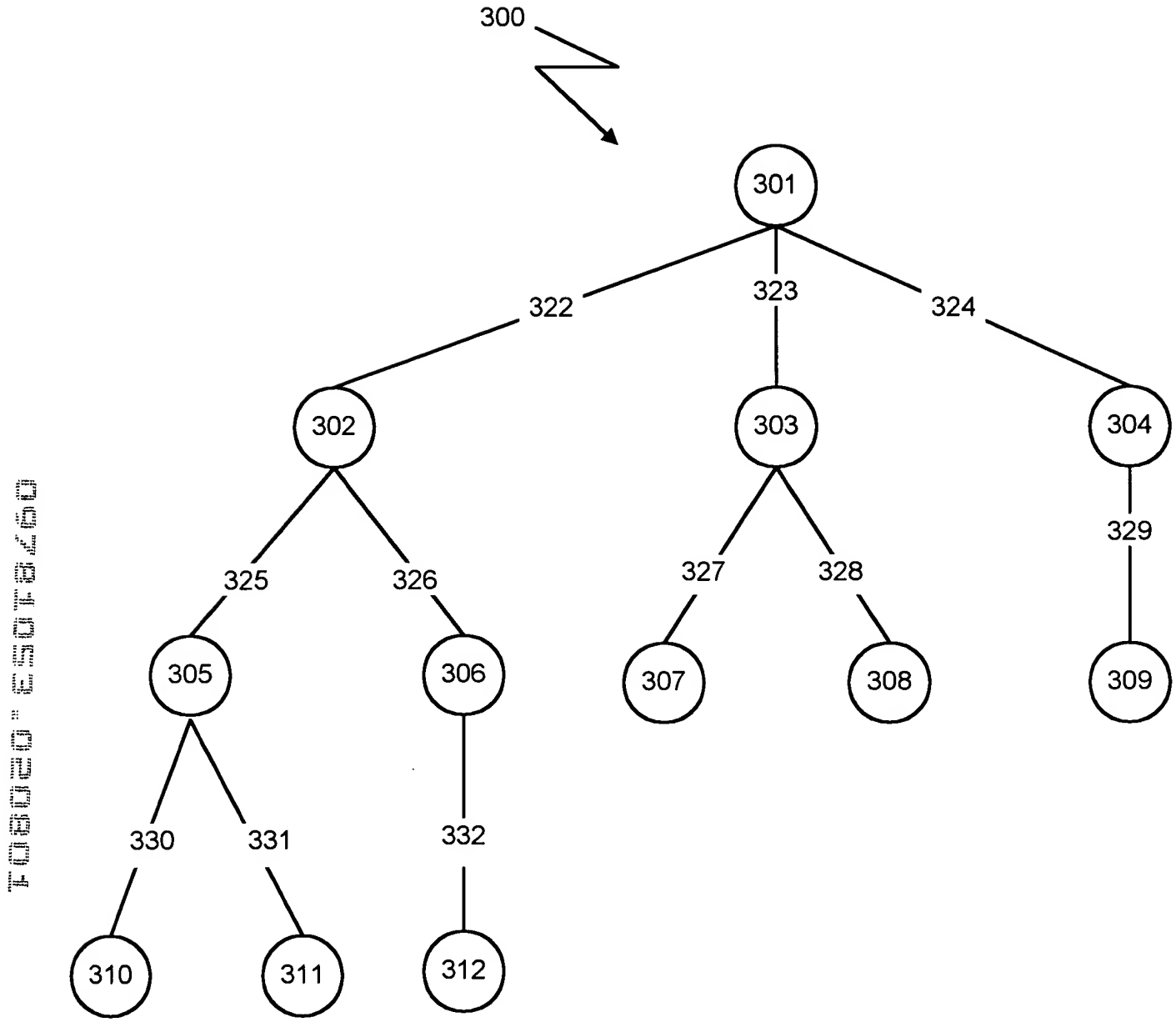
300
301
322
323
324
302
303
304
325
326
327
328
329
305
306
307
308
309
330
331
332
310
311
312

FIG. 3

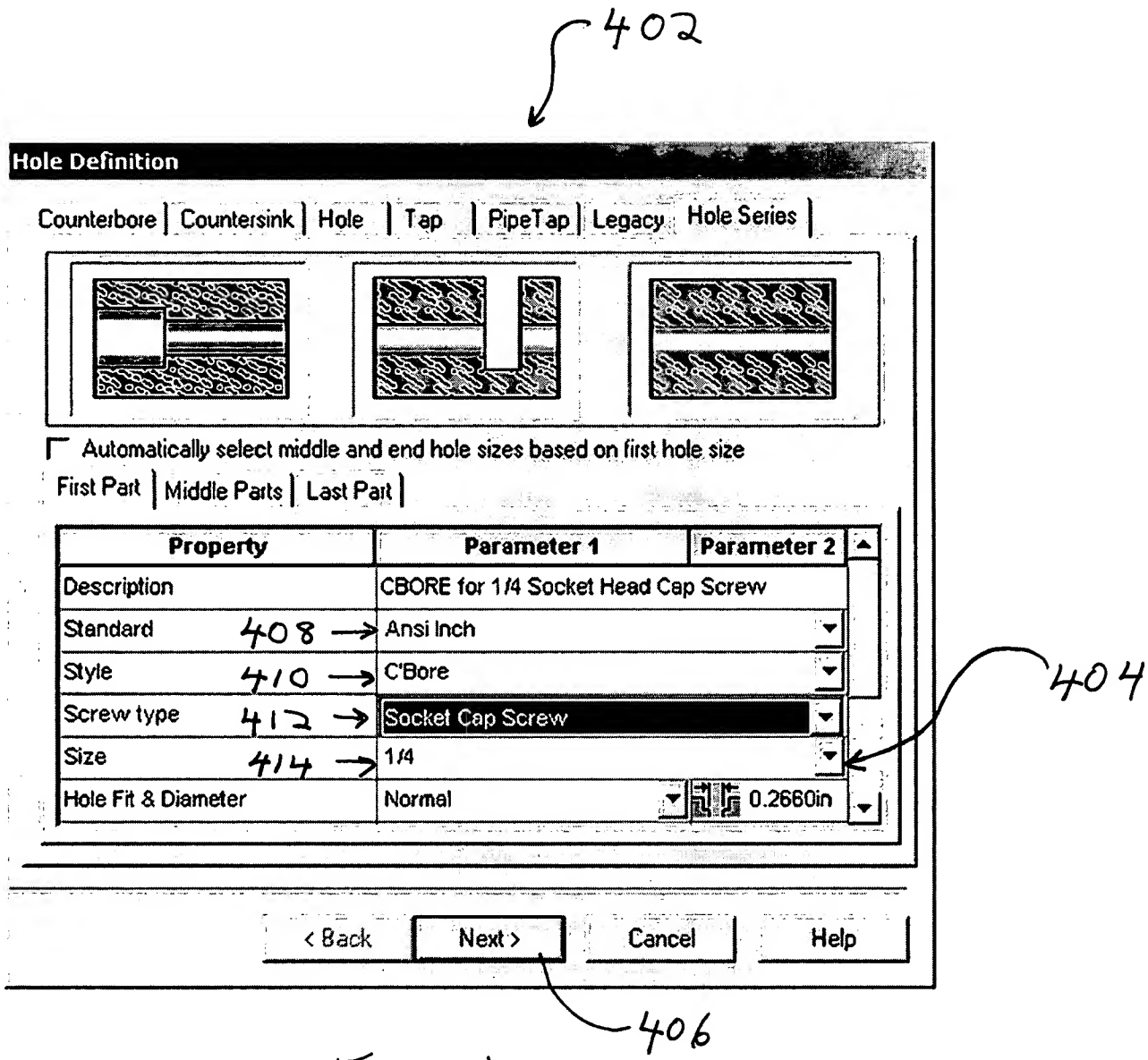
402
Hole Definition
Counterbore | Countersink | Hole | Tap | PipeTap | Legacy | Hole Series
Automatically select middle and end hole sizes based on first hole size
First Part | Middle Parts | Last Part
Property
Parameter 1
Parameter 2
Description
CBORE for 1/4 Socket Head Cap Screw
Standard
408
Ansi Inch
Style
410
C'Bore
Screw type
412
Socket Cap Screw
Size
414
1/4
Hole Fit & Diameter
Normal
0.2660in
404
< Back
Next >
Cancel
Help
406

Fig. 4

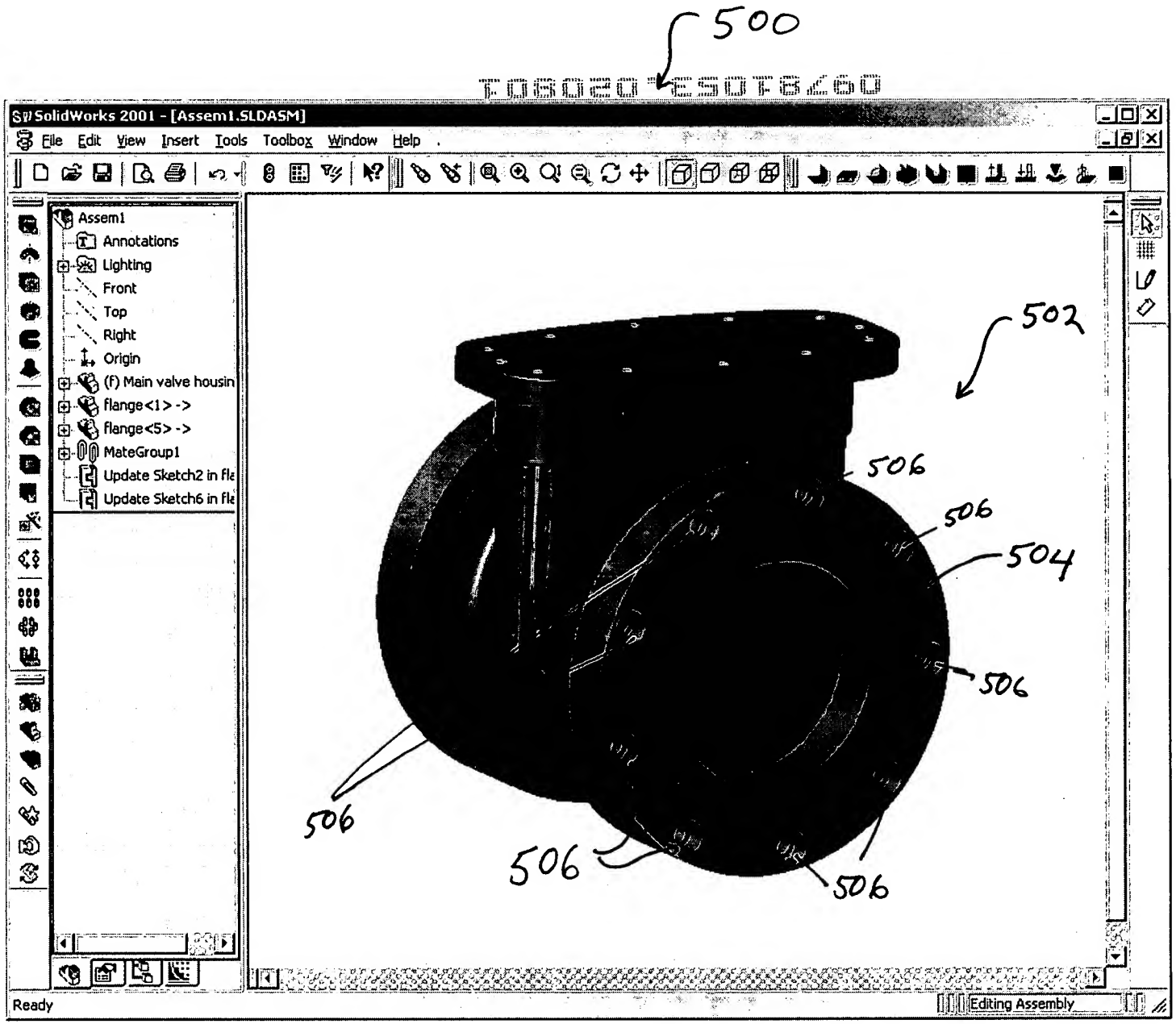
500
SolidWorks 2001 - [Assem1.SLDASM]
File Edit View Insert Tools Toolbox Window Help
Assem1
Annotations
Lighting
Front
Top
Right
Origin
(f) Main valve housin
flange<1> ->
flange<5> ->
MateGroup1
Update Sketch2 in fla
Update Sketch6 in fla
502
506
506
504
506
506
506
506
Ready
Editing Assembly

Fig. 5A

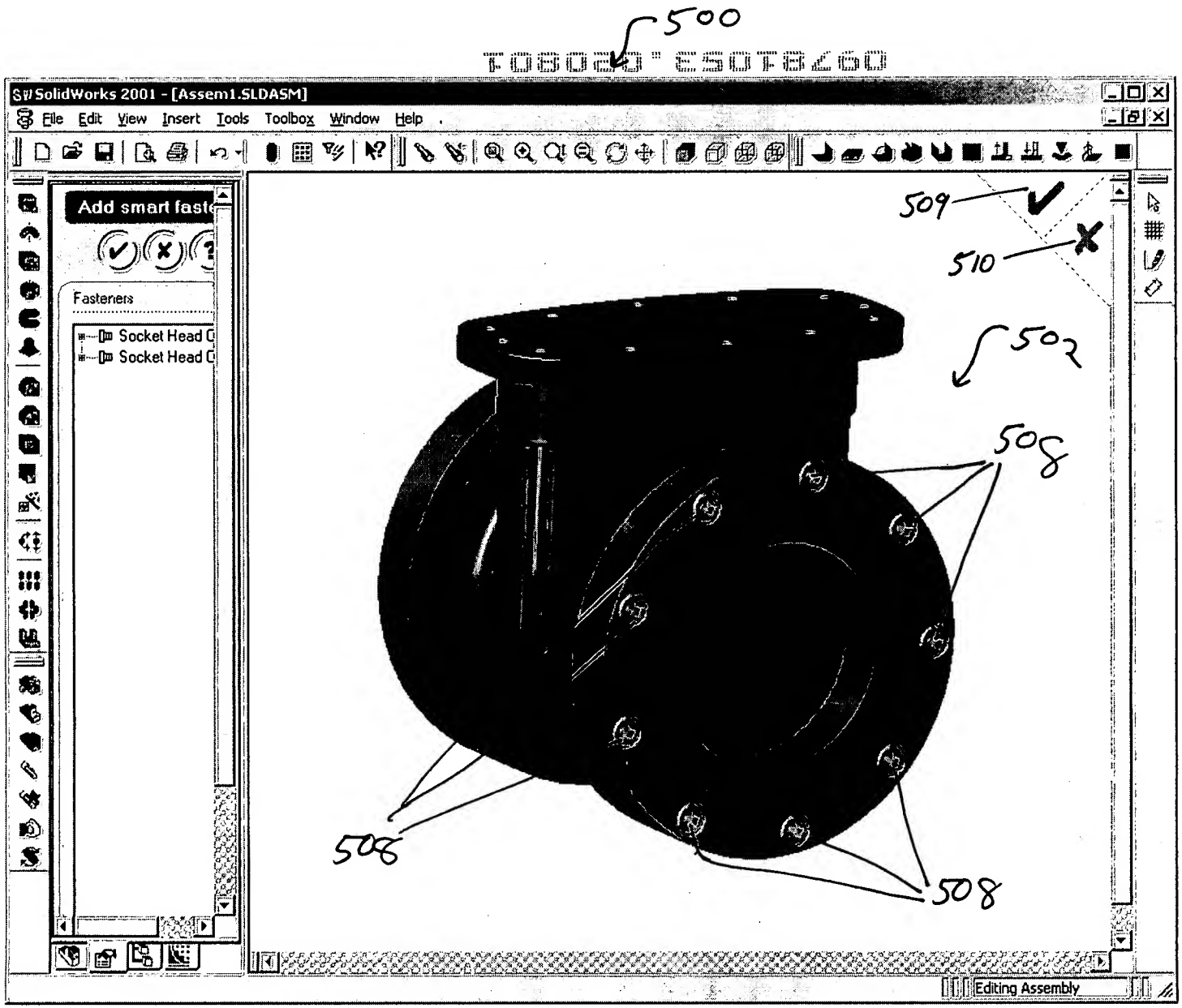
500
SolidWorks 2001 - [Assem1.SLDASM]
File Edit View Insert Tools Toolbox Window Help
Add smart faste
Fasteners
Socket Head C
Socket Head C
509
510
502
508
506
508
Editing Assembly

Fig. 5B

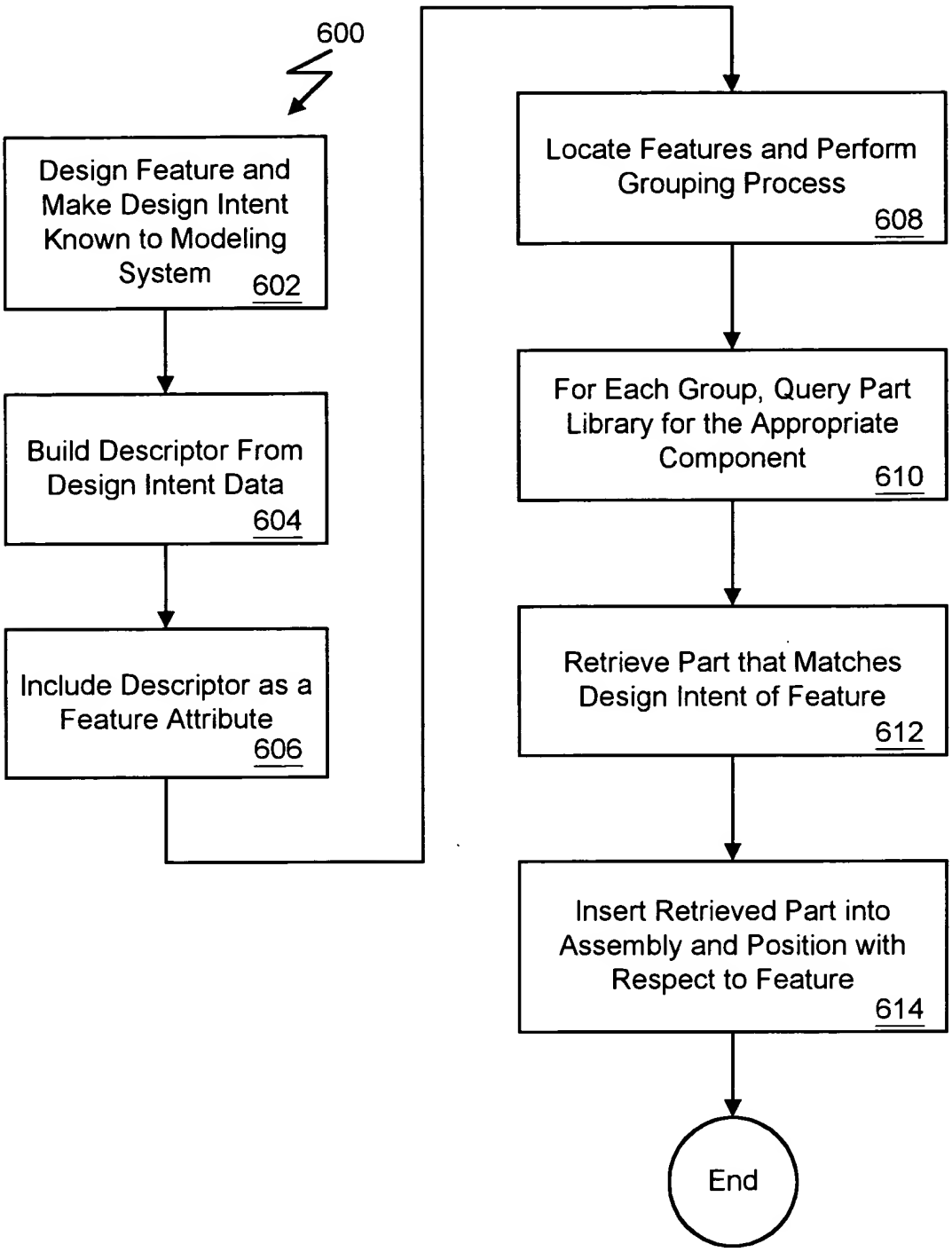
600
Design Feature and Make Design Intent Known to Modeling System 602
Build Descriptor From Design Intent Data 604
Include Descriptor as a Feature Attribute 606
Locate Features and Perform Grouping Process 608
For Each Group, Query Part Library for the Appropriate Component 610
Retrieve Part that Matches Design Intent of Feature 612
Insert Retrieved Part into Assembly and Position with Respect to Feature 614
End

Fig. 6

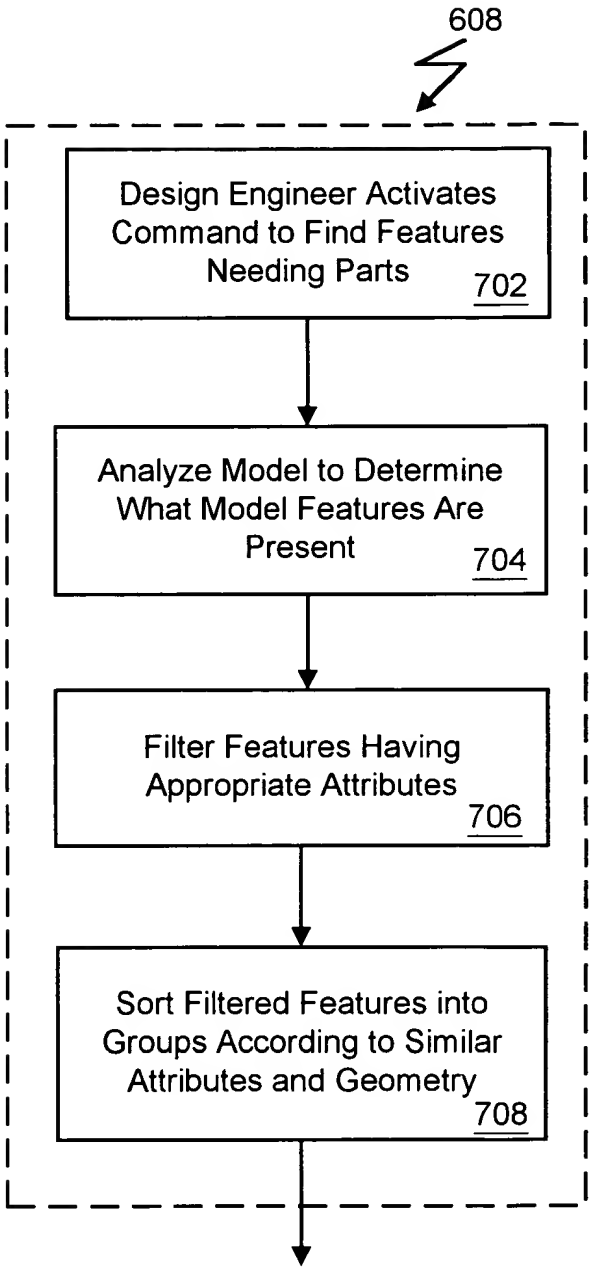
608
Design Engineer Activates Command to Find Features Needing Parts
702
Analyze Model to Determine What Model Features Are Present
704
Filter Features Having Appropriate Attributes
706
Sort Filtered Features into Groups According to Similar Attributes and Geometry
708

Fig. 7

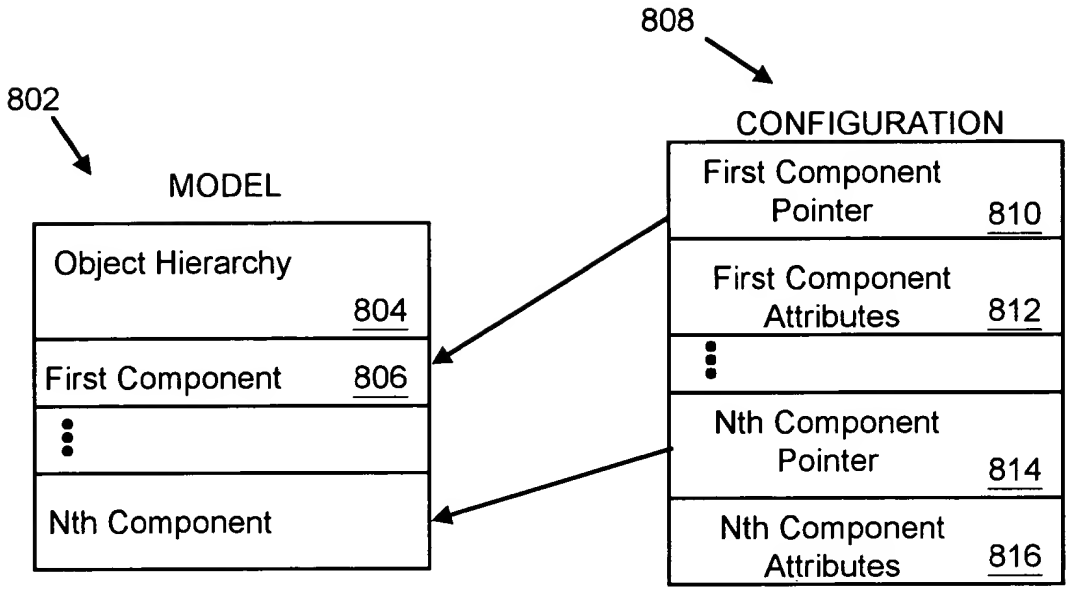
808
802
CONFIGURATION
MODEL
Object Hierarchy
804
First Component
806
Nth Component
First Component
Pointer
810
First Component
Attributes
812
Nth Component
Pointer
814
Nth Component
Attributes
816

FIG. 8

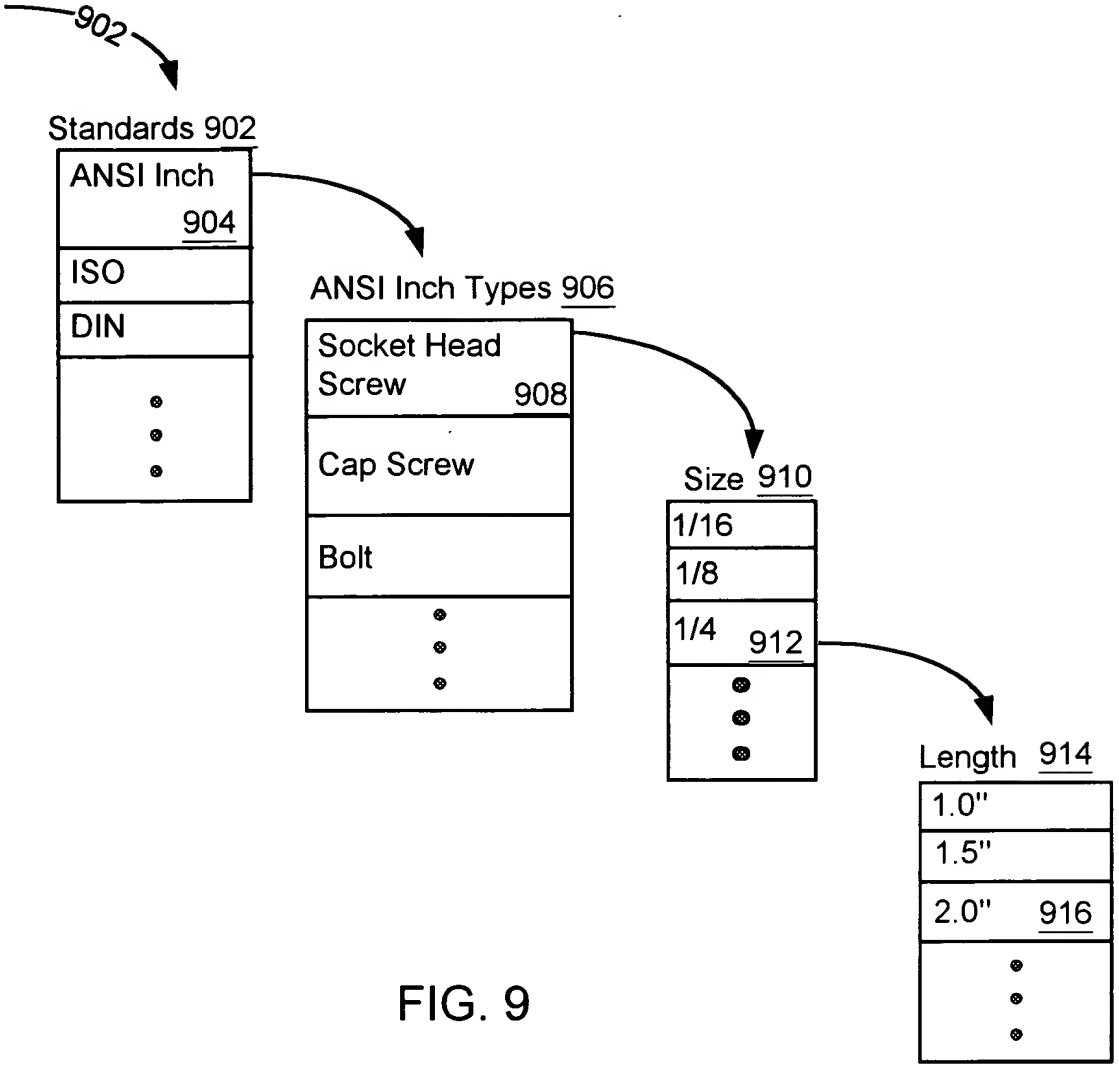
902
Standards 902
ANSI Inch
904
ISO
DIN
ANSI Inch Types 906
Socket Head Screw
908
Cap Screw
Bolt
Size 910
1/16
1/8
1/4
912
Length 914
1.0"
1.5"
2.0"
916

FIG. 9

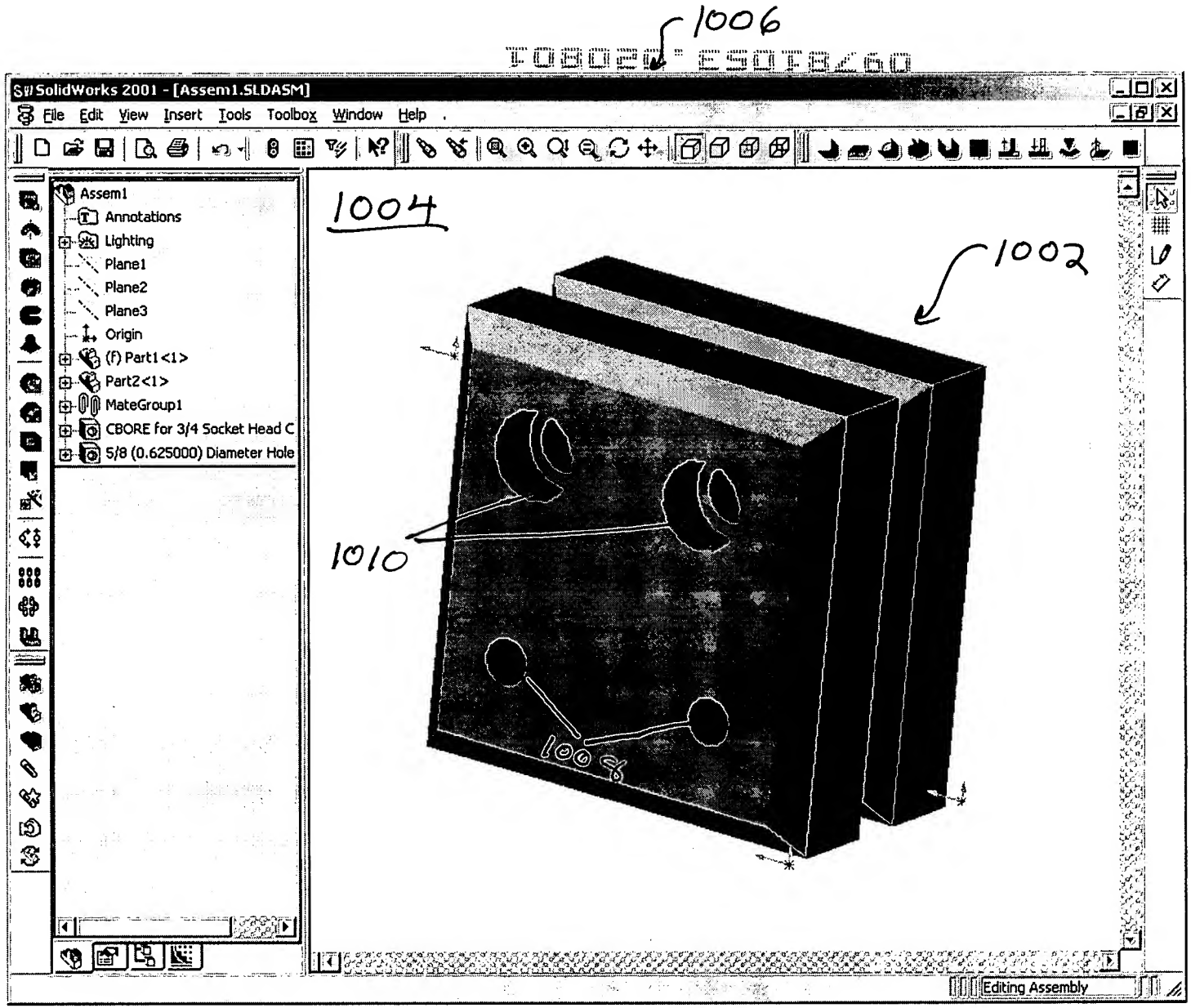
1006
SolidWorks 2001 - [Assem1.SLDASM]
File Edit View Insert Tools Toolbox Window Help
Assem1
Annotations
Lighting
Plane1
Plane2
Plane3
Origin
(f) Part1 <1>
Part2 <1>
MateGroup1
CBORE for 3/4 Socket Head C
5/8 (0.625000) Diameter Hole
1004
1002
1010
Editing Assembly

Fig. 10A

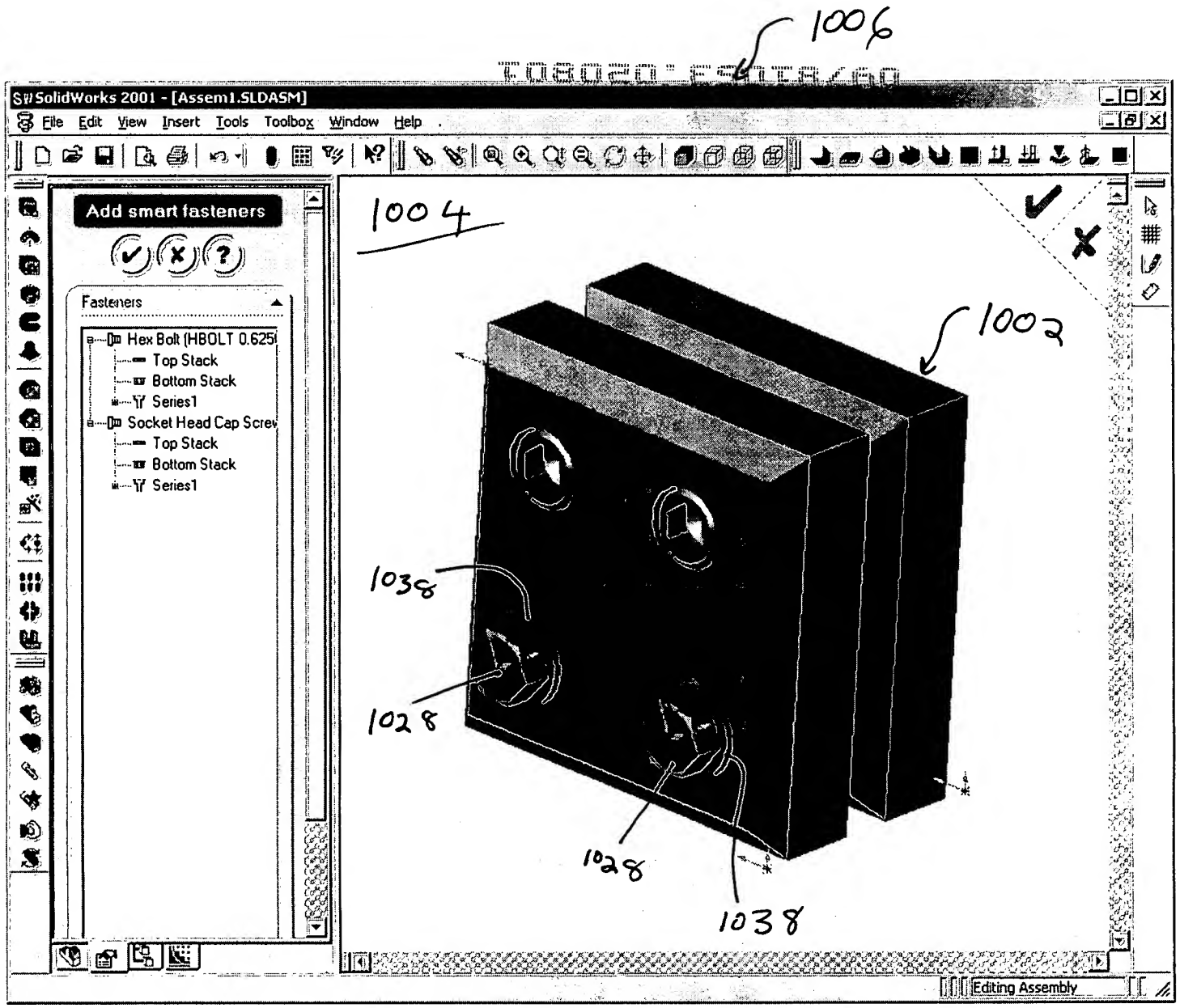
1006
SolidWorks 2001 - [Assem1.SLDASM]
File Edit View Insert Tools Toolbox Window Help
Add smart fasteners
Fasteners
Hex Bolt (HBOLT 0.625
Top Stack
Bottom Stack
Series1
Socket Head Cap Screv
Top Stack
Bottom Stack
Series1
1004
1002
1038
1028
1028
1038
Editing Assembly

Fig. 10B

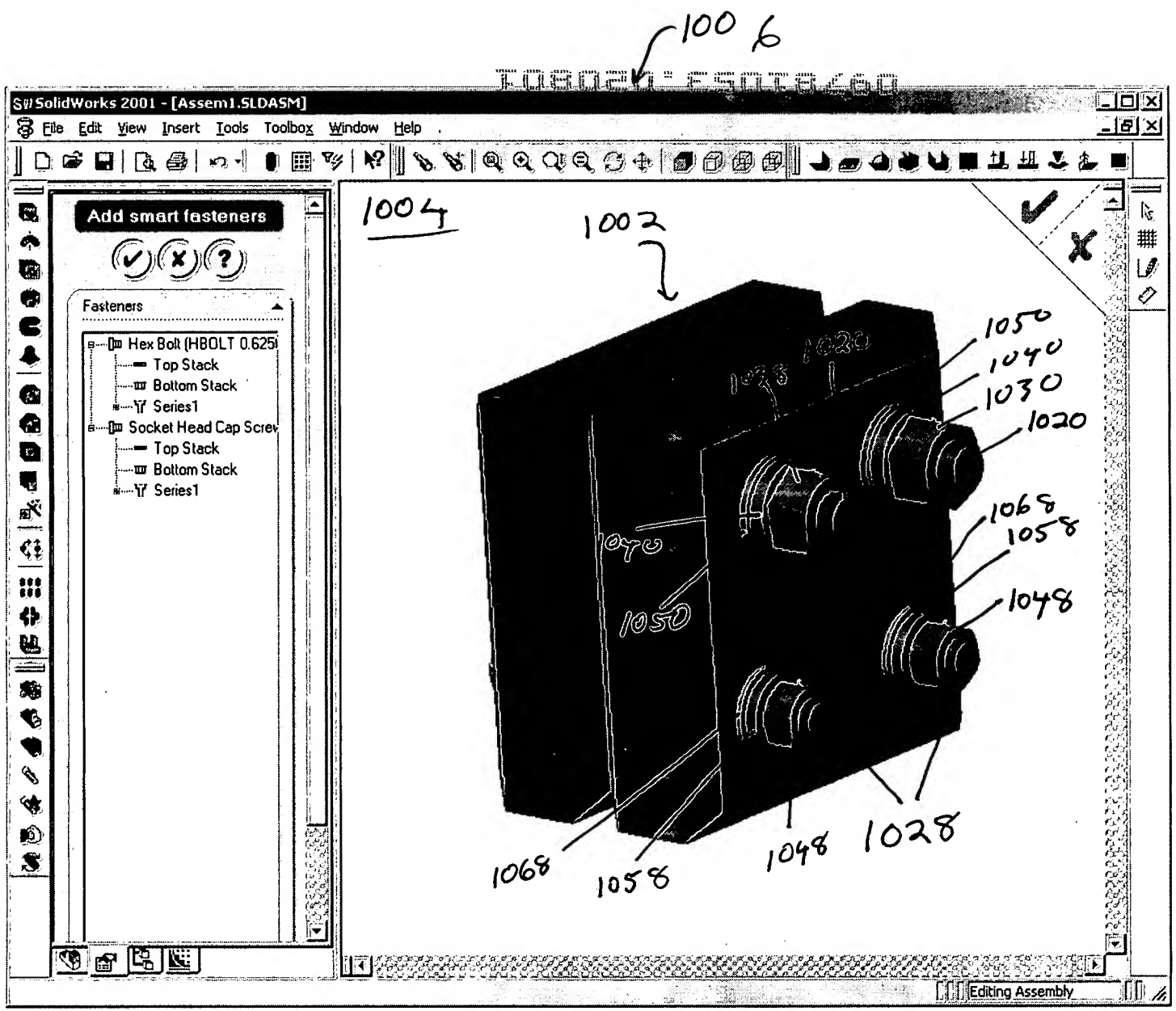
1006
SolidWorks 2001 - [Assem1.SLDASM]
File Edit View Insert Tools Toolbox Window Help
Add smart fasteners
Fasteners
Hex Bolt (HBOLT 0.625
Top Stack
Bottom Stack
Series1
Socket Head Cap Screv
Top Stack
Bottom Stack
Series1
1004
1002
1050
1040
1030
1020
1068
1058
1048
1028
Editing Assembly

Fig. 10C

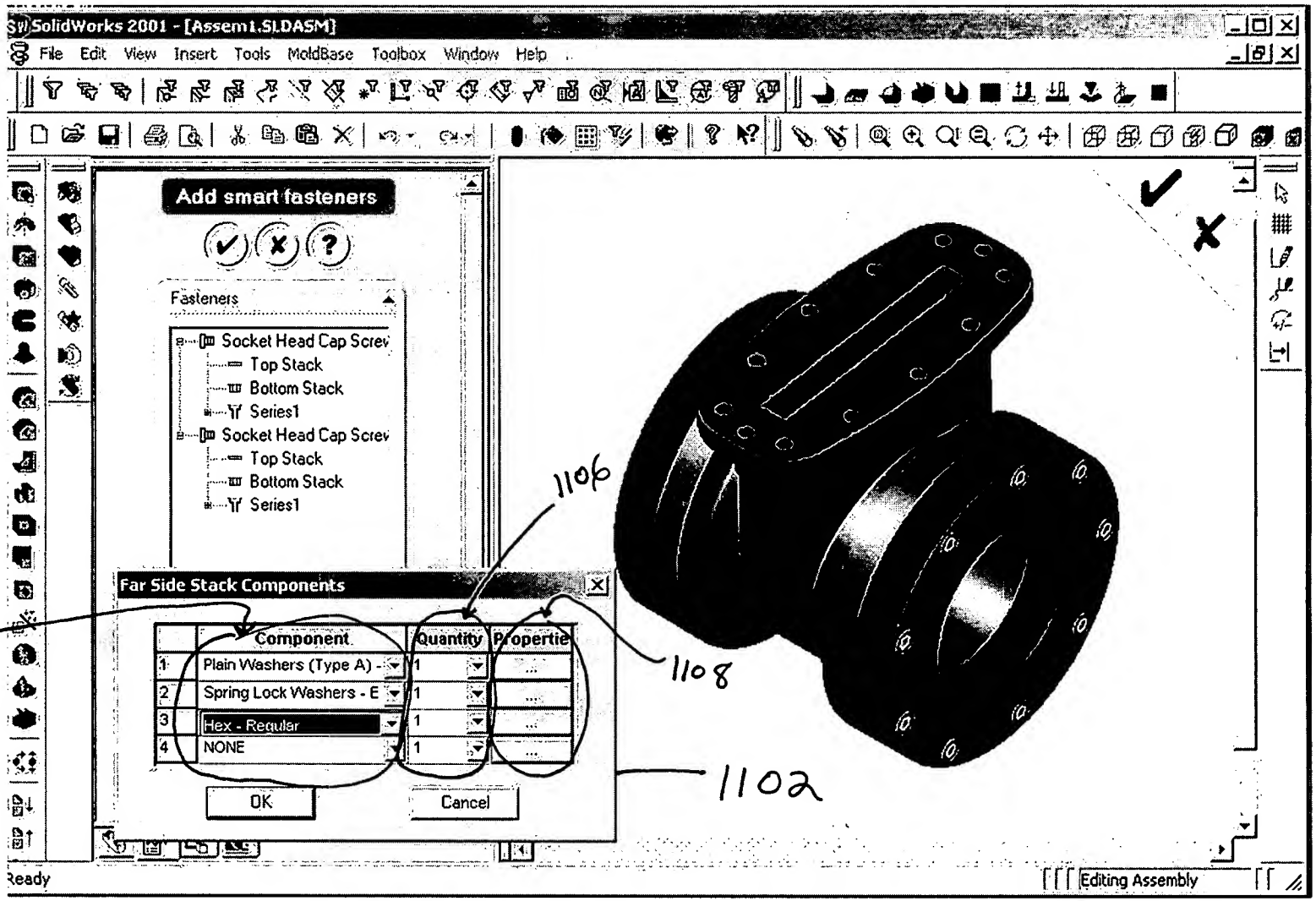
SolidWorks 2001 - [Assem1.SLDASM]
File Edit View Insert Tools MoldBase Toolbox Window Help
Add smart fasteners
Fasteners
Socket Head Cap Screv
Top Stack
Bottom Stack
Series1
Socket Head Cap Screv
Top Stack
Bottom Stack
Series1
Far Side Stack Components
Component
Quantity
Propertie
1 Plain Washers (Type A) -
2 Spring Lock Washers - E
3 Hex - Regular
4 NONE
OK
Cancel
1106
1104
1108
1102
Ready
Editing Assembly

Fig. 11

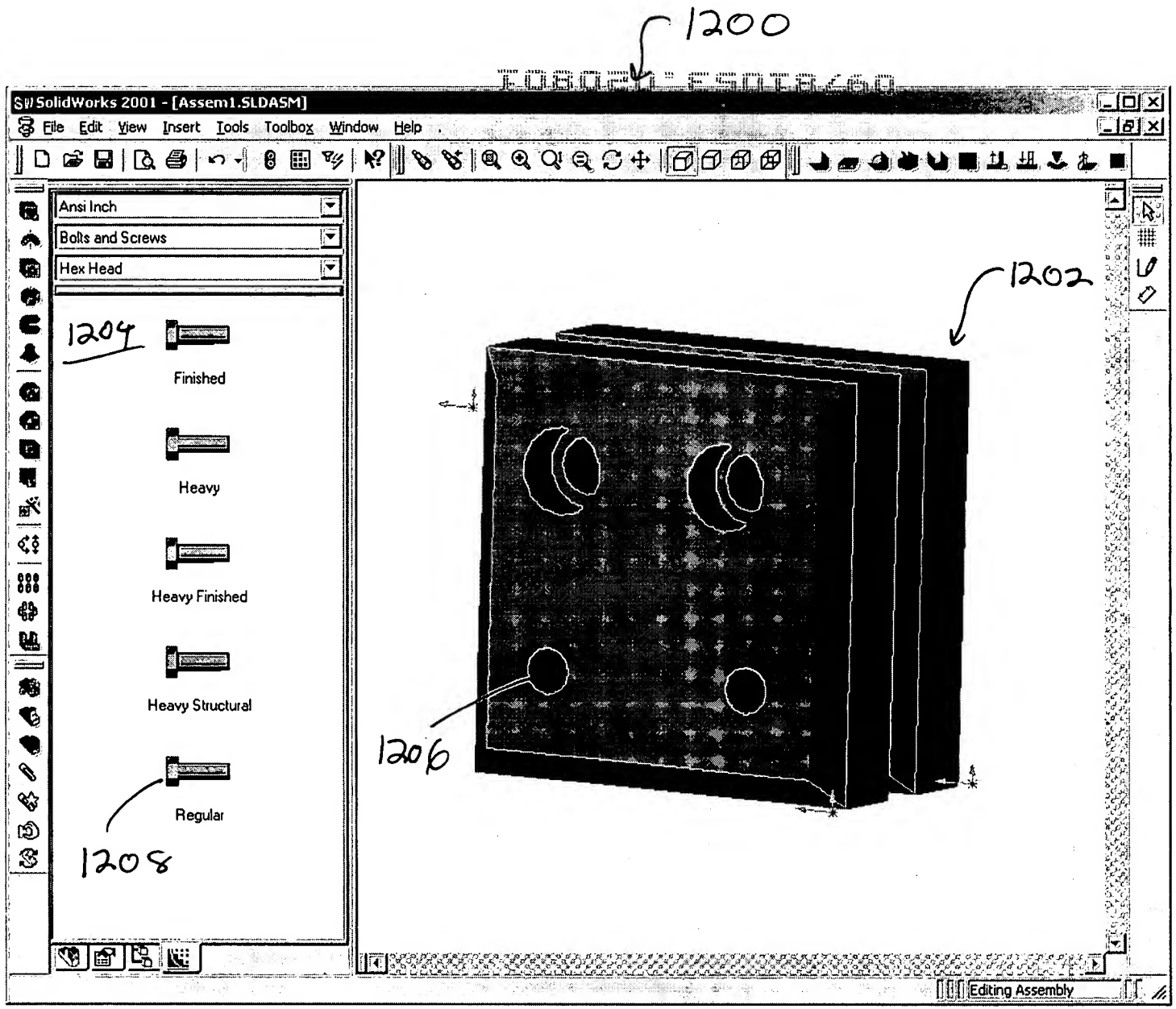
1200
SolidWorks 2001 - [Assem1.SLDASM]
File Edit View Insert Tools Toolbox Window Help
Ansi Inch
Bolts and Screws
Hex Head
1204
Finished
Heavy
Heavy Finished
Heavy Structural
Regular
1208
1202
1206
Editing Assembly

Fig. 12A

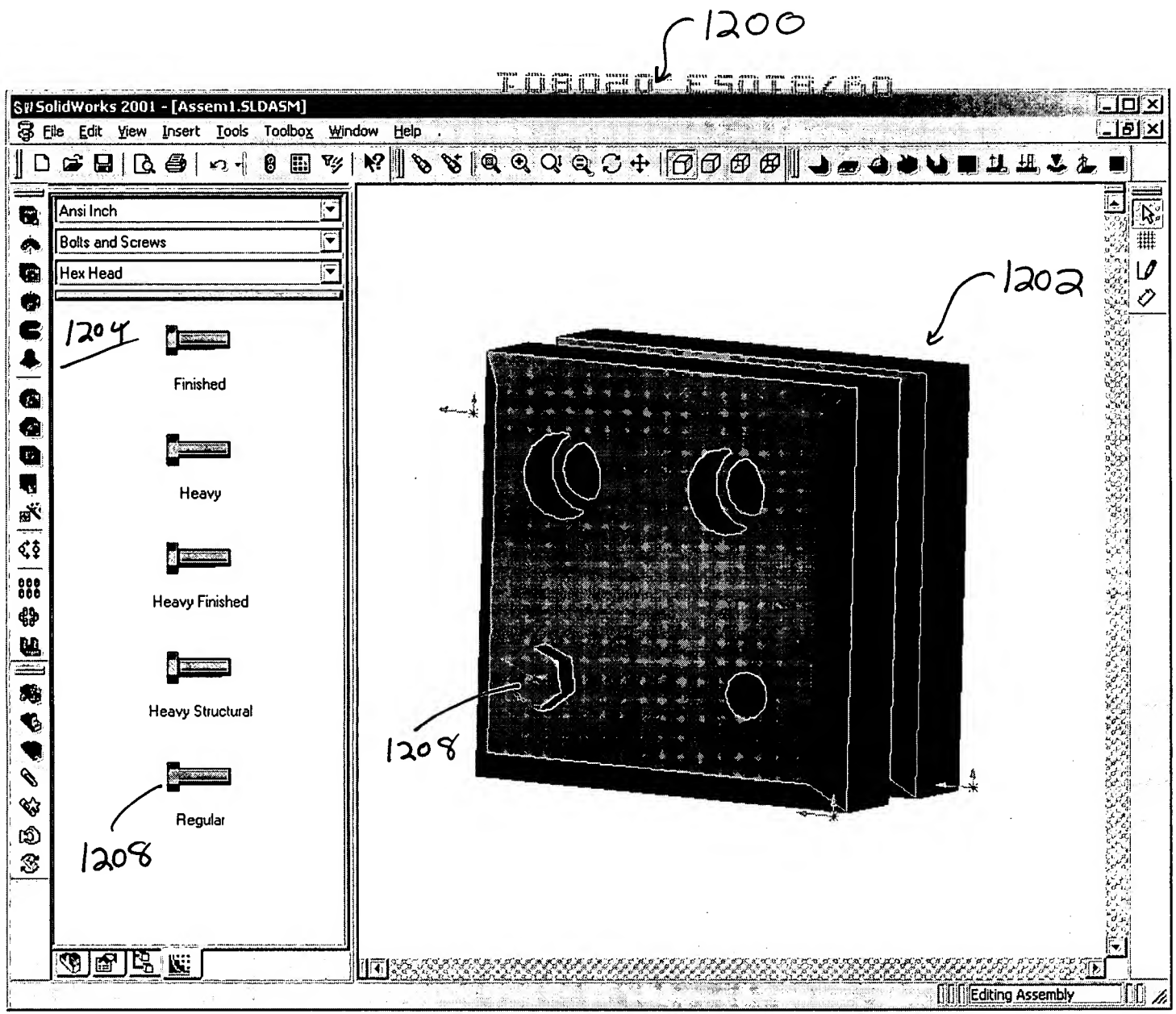
1200
SolidWorks 2001 - [Assem1.SLDASM]
File Edit View Insert Tools Toolbox Window Help
Ansi Inch
Bolts and Screws
Hex Head
1204
Finished
Heavy
Heavy Finished
Heavy Structural
Regular
1208
1202
1208
Editing Assembly

Fig. 12 B